

Incidence Rate Trends

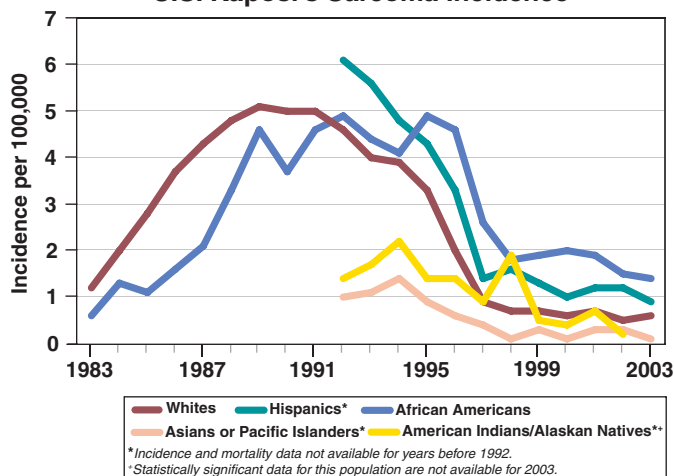
Kaposi's sarcoma (KS) is a soft-tissue sarcoma that affects the skin, oral cavity, esophagus, and anal canal. "Classic" KS is rare and is found mainly in older men of Mediterranean or Jewish heritage. Immunosuppressed individuals are also at increased risk for KS. The incidence of KS rose sharply in the 1980s with the emergence of acquired immune deficiency syndrome (AIDS), and it is now the most common tumor associated with human immunodeficiency virus (HIV) infection. Scientists have recently identified a virus, called Kaposi's sarcoma-associated herpesvirus (KSHV), which is believed to cause KS in immunocompromised individuals.

Men are much more likely to develop KS than women, and about 95 percent of epidemic KS cases in the United States occur in homosexual or bisexual men.¹ At the height of the epidemic, about 25 percent of HIV-positive men in this group developed KS. Official mortality data are not available for KS, but it is estimated that this cancer contributes to approximately 30 percent of AIDS-related deaths.

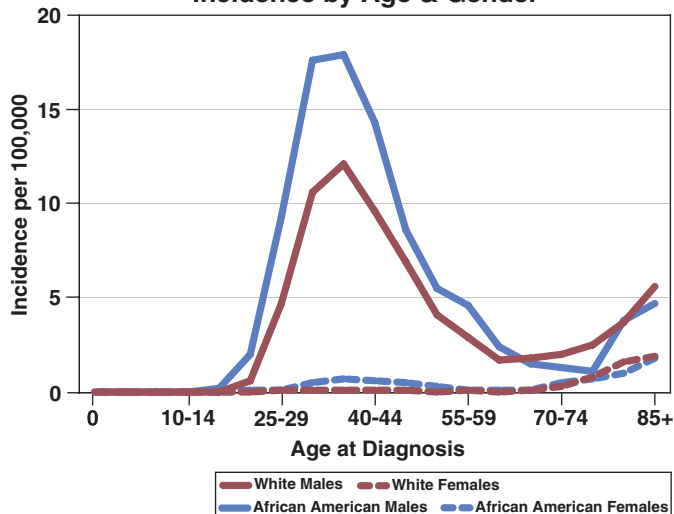
Source for incidence data: Surveillance, Epidemiology, and End Results (SEER) Program and the National Center for Health Statistics. Additional statistics and charts are available at <http://seer.cancer.gov/>.

¹Selik RM, Starcher ET, Curran JW: Opportunistic diseases reported in AIDS patients: frequencies, associations, and trends. *AIDS* 1987;1(3):175-82.

U.S. Kaposi's Sarcoma Incidence



U.S. Kaposi's Sarcoma Incidence by Age & Gender



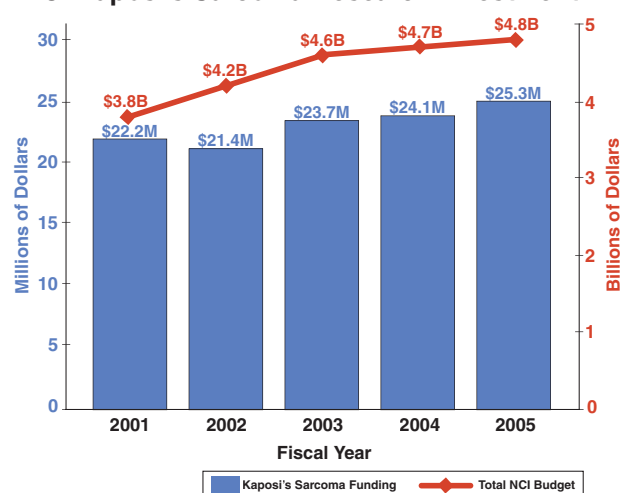
Trends in NCI Funding for Kaposi's Sarcoma Research

The National Cancer Institute's (NCI's) investment² in KS research has increased from \$22.2 million in fiscal year 2001 to \$25.3 million in fiscal year 2005.

Source: NCI Financial Management Branch
<http://fmb.cancer.gov>.

²The estimated NCI investment is based on funding associated with a broad range of peer-reviewed scientific activities. For additional information on research priorities and funding, see <http://www.nih.gov/about/researchpriorities.htm#overview>.

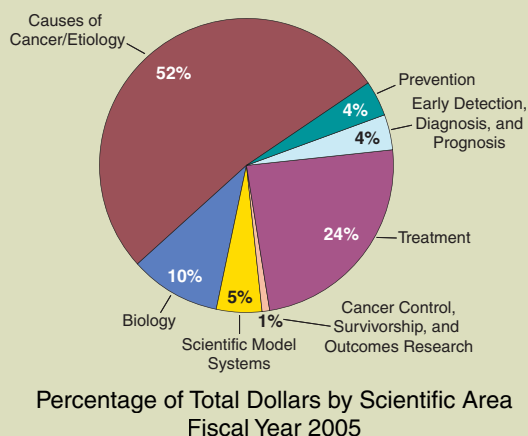
NCI Kaposi's Sarcoma Research Investment



Examples of NCI Research Initiatives Relevant to Kaposi's Sarcoma

- NCI is supporting research on **Malignancies in AIDS and Acquired Immune Suppression**. This research is addressing the biological basis of development and progression of cancer in the context of HIV infection and AIDS. <http://grants1.nih.gov/grants/guide/pa-files/PA-06-338.html>
- The **AIDS Malignancy Consortium** includes 14 clinical trials sites and their affiliates, which are enhancing therapeutic options for patients with AIDS-associated malignancies. www.amcoperations.com
- **Clinical Trials** are actively recruiting patients with KS to test new treatments and treatment combinations. <http://www.cancer.gov/search/clinicaltrials/>
- The **AIDS Virus Studies Program** supports basic science investigations of the role of HIV and related viruses in the development of AIDS-associated cancers. <http://dcb.nci.nih.gov/branchdetail.cfm?branch=35>
- The **AIDS Malignancy Program** supports preclinical and clinical studies on the treatment of cancer in HIV-positive and immunocompromised people. <http://cancer.gov/dctd/aids>
- The NCI-supported **Tissue and Biological Fluids Banks of HIV-Related Malignancies** provide

NCI Kaposi's Sarcoma Research Portfolio



Data on training grants are not included in this figure. A description of the relevant research projects can be found at the NCI Cancer Research Portfolio website at <http://researchportfolio.cancer.gov>.

access to HIV-associated tumor tissue, biological specimens, and associated clinical outcome data for use in research on the development of these malignancies. <http://acsb.ucsf.edu/>

- The **Sarcoma Progress Review Group (PRG)**, a panel of experts and patient advocates, assessed the state of the science and identified future research priorities for all types of sarcoma, including Kaposi's. <http://planning.cancer.gov/pdfprgreports/2004sarcoma.pdf>
- The **AIDS-Related Cancers Home Page** provides up-to-date information on treatment options for AIDS-related cancers such as KS. <http://cancer.gov/cancerinfo/types/AIDS>

Selected Opportunities for Advancement of Kaposi's Sarcoma Research

- Design innovative, prospective therapeutic clinical trials that compare surrogate (intermediate) endpoints to conventional endpoints. These trials will require close collaboration with statisticians and laboratory scientists and the use of banked tissue resources. Surrogate endpoints are based

on the detection of biological markers, such as changes in the levels of a relevant protein. Clinical trials validated by surrogate endpoints can be completed more quickly than traditional trials that use conventional endpoints.